

WHAT IS CLAIMED IS:

1                   1.       A retrofitted printing system including an existing printer and printer  
2 controller combination, the retrofitted printing system comprising:  
3                   a monitor coupled to the printer, wherein the monitor is operable to provide an  
4 indication of status associated with the printer; and  
5                   a microprocessor based system controller coupled to the monitor and the  
6 printer controller, wherein the system controller includes a computer readable medium, and  
7 wherein the computer readable medium includes instructions executable by the  
8 microprocessor to:  
9                   receive an operator command;  
10                  format the operator command into a command compatible with the  
11 printer and printer controller combination;  
12                  provide the command compatible with the printer and printer controller  
13 combination to the printer controller; and  
14                  receive the indication of status associated with the printer from the  
15 monitor.

1                   2.       The retrofitted printing system including an existing printer and printer  
2 controller combination of claim 1, wherein the monitor comprises:  
3                   an encoder, wherein the encoder is coupled to a stock advance mechanism of  
4 the printer; and  
5                   a monitor controller, wherein the monitor controller is communicably coupled  
6 to the encoder and to the system controller, and wherein the monitor controller is operable to  
7 format information from the encoder to a format compatible with the system controller.

1                   3.       The retrofitted printing system including an existing printer and printer  
2 controller combination of claim 1, wherein a stock quantity is installed on the printer such  
3 that the printer is operable to print on the stock quantity, and wherein the computer readable  
4 medium further includes instructions executable by the microprocessor to:  
5                   determine an actual length of the stock quantity utilized.

1                   4.       The retrofitted printing system including an existing printer and printer  
2 controller combination of claim 3, wherein the operator command indicates a start of a

3 particular print job, and wherein the computer readable medium further includes instructions  
4 executable by the microprocessor to:

5                   access the particular print job; and  
6                   based at least in part on the accessed print job, determining an optimum length  
7 of the stock quantity to be used.

1                   5.       The retrofitted printing system including an existing printer and printer  
2 controller combination of claim 4, wherein the computer readable medium further includes  
3 instructions executable by the microprocessor to:

4                   determine an actual length remaining on the stock quantity.

1                   6.       The retrofitted printing system including an existing printer and printer  
2 controller combination of claim 5, wherein the computer readable medium further includes  
3 instructions executable by the microprocessor to:

4                   compare the actual length remaining on the stock quantity and the optimum  
5 length of the stock quantity to be used.

1                   7.       The retrofitted printing system including an existing printer and printer  
2 controller combination of claim 6, wherein the system controller includes a display, and  
3 wherein the computer readable medium further includes instructions executable by the  
4 microprocessor to:

5                   display the actual length remaining on the stock quantity on the display; and  
6                   display the optimum length of the stock quantity to be used on the display.

1                   8.       The retrofitted printing system including an existing printer and printer  
2 controller combination of claim 4, wherein the computer readable medium further includes  
3 instructions executable by the microprocessor to:

4                   compare the actual length of the stock quantity utilized and the optimum  
5 length of the stock quantity to be used.

1                   9.       The retrofitted printing system including an existing printer and printer  
2 controller combination of claim 8, wherein the computer readable medium further includes  
3 instructions executable by the microprocessor to:

4                   determine a waste associated with the particular print job.

1                   10.     The retrofitted printing system including an existing printer and printer  
2 controller combination of claim 9, wherein the computer readable medium further includes  
3 instructions executable by the microprocessor to:

4                   log a status of the particular print job in relation to an operator associated with  
5 the particular print job; and

6                   based at least in part on the status of the particular print job, form a rating of  
7 the operator.

1                   11.     The retrofitted printing system including an existing printer and printer  
2 controller combination of claim 1, wherein the system controller includes a graphical user  
3 interface.

1                   12.     A method for retrofitting an existing printer and printer controller  
2 combination, the method comprising:

3                   coupling a system controller to the printer controller, wherein the system  
4 controller includes a display;

5                   coupling a monitor to the printer, wherein the monitor includes:

6                   an encoder and a monitor controller, and wherein the encoder is  
7 coupled to a stock advance mechanism of the printer; and

8                   a monitor controller, wherein the monitor controller is communicably  
9 coupled to the encoder and to the system controller;

10                  providing a graphical user interface on the display;

11                  receiving an operator command via the graphical user interface, wherein the  
12 operator command indicates a particular print job;

13                  formatting the operator command into a command compatible with the printer  
14 and printer controller combination;

15                  providing the command compatible with the printer and printer controller  
16 combination to the printer controller;

17                  receiving the indication of status associated with the printer from the monitor;

18                  based at least in part on the indication of status associated with the printer  
19 from the monitor, determining an actual length of the stock quantity utilized in relation to the  
20 particular print job;

21                  determining an optimum length of the stock quantity to be used in relation to  
22 the particular print job;

23 comparing the actual length of the stock quantity utilized and the optimum  
24 length of the stock quantity to be used; and  
25 determining a waste associated with the particular print job.

1 13. The method of claim 12, wherein the method further comprises:  
2 determining an actual length remaining on the stock quantity.

1 14. The method of claim 13, wherein the method further comprises:  
2 comparing the actual length remaining on the stock quantity and the optimum  
3 length of the stock quantity to be used.

1 15. The method of claim 14, wherein the method further comprises:  
2 displaying the actual length remaining on the stock quantity on the display;  
3 and  
4 displaying the optimum length of the stock quantity to be used on the display.

1 16. The method of claim 14, wherein the stock quantity is a first stock  
2 quantity, and wherein the method further comprises:  
3 installing a second stock quantity on the printer based at least in part on the  
4 comparison of the actual length remaining on the stock quantity and the optimum length of  
5 the stock quantity to be used.

1 17. The method of claim 12, wherein the method further comprises:  
2 logging a status of the particular print job in relation to an operator associated  
3 with the particular print job; and  
4 based at least in part on the status of the particular print job, rating the  
5 operator.

1 18. A method for monitoring usage of a printer and printer monitor  
2 combination, the method comprising:  
3 receiving an operator command indicating a particular print job;  
4 formatting the operator command into a command compatible with the printer  
5 and printer controller combination;  
6 providing the command compatible with the printer and printer controller  
7 combination to the printer controller;  
8 receiving an indication of status from the printer;

9 based at least in part on the indication of status from the printer, determining  
10 an actual length of a stock quantity utilized in relation to the particular print job;  
11 determining an optimum length of the stock quantity to be used in relation to  
12 the particular print job;  
13 comparing the actual length of the stock quantity utilized and the optimum  
14 length of the stock quantity to be used; and  
15 determining a waste associated with the particular print job.

1 19. The method of claim 18, wherein the method further comprises:  
2 authenticating an operator in association with the particular print job.

1 20. The method of claim 19, wherein the method further comprises:  
2 logging a status of the particular print job in relation to the operator; and  
3 based at least in part on the status of the particular print job, rating the  
4 operator.